

BAM-1020 Audit Sheet

Model: **BAM-1020**

Serial Number: **T21292**

Audit Date: **11/2/2016**

Audited By: **M. Hertz**

| Flow Audits | | | |
|------------------------------------|-----------------------------|--------------------------|----------------------------------|
| Flow Reference Standard Used: | Model: BGI Delta Cal | Serial No: 010558 | Calibration Date: 1/15/16 |
| Temperature Standard Used: | Model: " | Serial No: " | Calibration Date: " |
| Barometric Pressure Standard Used: | Model: " | Serial No: " | Calibration Date: " |

Leak Check Value: as found: **0.2** lpm

as left: **0.2** lpm

| | BAM | Ref. Std. |
|--------------------------------|---------------------------|------------------|
| Ambient Temperature: | as found: 25.7 C | 25.4 C |
| Barometric Pressure: | as found: 750 mmHg | 749 mmHg |
| Flow Rate (Actual Volumetric): | as found: 16.7 lpm | 16.76 lpm |
| Flow Rate (EPA Standard): | as found: slpm | slpm |

| | BAM | Ref. Std. | |
|----------|-----------------|------------------|---|
| as left: | 24.5 C | 24.5 C | N/A <input type="checkbox"/> |
| as left: | 749 mmHg | 749 mmHg | |
| as left: | 16.7 lpm | 16.71 lpm | N/A <input type="checkbox"/> |
| as left: | slpm | slpm | N/A <input checked="" type="checkbox"/> |

Mechanical Audits

| | | |
|--------------------------------|--|---|
| Pump muffler unclogged: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> |
| Sample nozzle clean: | as found <input type="checkbox"/> | as left <input checked="" type="checkbox"/> |
| Tape support vane clean: | as found <input type="checkbox"/> | as left <input checked="" type="checkbox"/> |
| Capstan shaft clean: | as found <input type="checkbox"/> | as left <input checked="" type="checkbox"/> |
| Rubber pinch rollers clean: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> |
| Chassis ground wire installed: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> |

| | | | |
|----------------------------------|--|---|---|
| PM10 particle trap clean: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| PM10 drip jar empty: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| PM10 bug screen clear: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| PM2.5 particle trap clean: | as found <input type="checkbox"/> | as left <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| Inlet tube water-tight seal OK: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> | |
| Inlet tube perpendicular to BAM: | as found <input checked="" type="checkbox"/> | as left <input checked="" type="checkbox"/> | |

| Analog Voltage Output Audit | | | N/A <input checked="" type="checkbox"/> |
|-----------------------------|--------------------|----------------------|---|
| DAC Test Screen | BAM Voltage Output | Logger Voltage Input | |
| 0.000 Volts | Volts | Volts | |
| 0.500 Volts | Volts | Volts | |
| 1.000 Volts | Volts | Volts | |

| Membrane Audit | |
|------------------|--------------|
| LAST m (mg): | 0.747 |
| ABS (mg): | 0.751 |
| Difference (mg): | 0.034 |
| % Difference: | 4.5% |

| Flow Control Range | |
|--------------------|-------------|
| Flow Setpoint | BAM Flow |
| 15.0 LPM | 15.0 |
| 16.7 LPM | 16.7 |
| 18.4 LPM | 18.4 |

| Setup and Calibration Values | | | | | | | | |
|------------------------------|-------------------------|-------------------------|-----------|----------------|----------------|------------------|-----------------|-----------------|
| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
| Clock Time/Date | 15:15 | 15:15 | FLOW TYPE | Actual | Actual | AP | 11/15/16 | 11/15/16 |
| RS232 baud | 9600 | 9600 | Cv | 00.492 | 00.492 | FRI | 10 | 10 |
| STATION # | 001 | 001 | Qo | 00.000 | 00.000 | FRh | 20 | 20 |
| RANGE | 2.00 | 2.00 | ABS | 00.781 | 00.781 | Password | 12341 | 12341 |
| BAM SAMPLE | 50 | 50 | μ sw | 00.311 | 00.311 | Cycle Mode | standard | standard |
| MET SAMPLE | 60 | 60 | K Factor | 00.987 | 00.987 | RH Control | Yes | Yes |
| OFFSET | -0.015 | -0.015 | BKGD | -0.0001 | -0.0001 | RH Setpoint | 35 | 35 |
| CONC UNITS | mg/m³ | mg/m³ | STD TEMP | 25 | 25 | Datalog RH | Yes | Yes |
| COUNT TIME | 4 | 4 | HEATER | Auto | Auto | Delta-T Control | NO | NO |
| FLOW RATE | 16.7 | 16.7 | el | -0.015 | -0.015 | Delta-T Setpoint | 99 | 99 |
| CONC TYPE | STD | STD | Errors | 00 | 00 | Datalog Delta-T | NO | NO |

| Last 6 Errors in BAM-1020 Error Log | | | | |
|-------------------------------------|-----------|-------|-------|-----------|
| Error | Date | Time | Error | Date |
| 1 M | 11/2/2016 | 18:12 | 4 T | 11/2/2016 |
| 2 M | 11/2/2016 | 16:52 | 5 T | 11/2/2016 |
| 3 T | 11/2/2016 | 16:00 | 6 T | 11/2/2016 |
| | | | | 13:00 |

Audit Notes: Quarterly audit, filter tape change. All monthly and quarterly maint. complete.